

Non-profit, self-published by

Roshan Chapagain

Profession : Advocate since 2009



2026



978-9905-0-0083-4

Barter Standard Economy



**Barter  
Standard  
Monetary  
Economy  
and  
Socialism:  
Interrelationship  
and  
Earlier  
Mistakes**

**Barter Standard Monetary Economy and Socialism:  
Interrelationship and Earlier Mistakes**

**By**

**Roshan Chapagain, Advocate**

**Forwarded by Ranji Thomas, Senior Advocate**

Self-Published by the Author (Non-Profit)

First published in April 2026

Barter Standard Monetary Economy and Socialism: Interrelationship and Earlier Mistakes

By Roshan Chapagain, Advocate

International Standard Book Number (ISBN): 978-9905-0-0083-4



The present ISBN is provided by Tribhuvan University Central Library, Kirtipur, Kathmandu, Nepal for the present book.

Copyright © 2026 by Roshan Chapagain, Adv.

All rights to this book are reserved by the author. Thus, no portion of this book may be reproduced, by any process or technique, without the express written consent of the author (self-publisher). For further information contact Roshan Chapagain (Author-cum-non-profit self-publisher), Phone Number: 091-8527586125, [Email: roshandinglachandragadi@gmail.com](mailto:roshandinglachandragadi@gmail.com), Chandragadi, Bhadrapur-7, Jhapa, Nepal, Also at: Flat No. 302, Tower 9, Supreme Towers, Sector-99, NOIDA Pin Code: 201301, India, Also at: Library No. 4, Fourth Floor, S.C Setalward Block (New Layers Chambers), Supreme Court, New Delhi-110001.

All rights are reserved by the author.

This book is designed to provide the author's findings and opinions based upon research and analysis of the subject matter covered. The information provided herein is not intended for the purpose of rendering legal services.

Therefore, the author (self-publisher) disclaims any responsibility for any liability or loss incurred as a consequence of the use and application, either directly or indirectly, if any advice or information presented herein.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. This publication is sold with the understanding that the publisher is not engaged in rendering professional services.

Price: Rs. 2,500 (in Nepalese rupees, Nepal);  
Rs. 1,550 (in Indian rupees, India)

For Dedication to My Paternal Uncle

Govind Chapagain, Banker  
Mithila LaghuBitta Bikas Bank Ltd, Dhalkewar,  
Dhanusha, Nepal

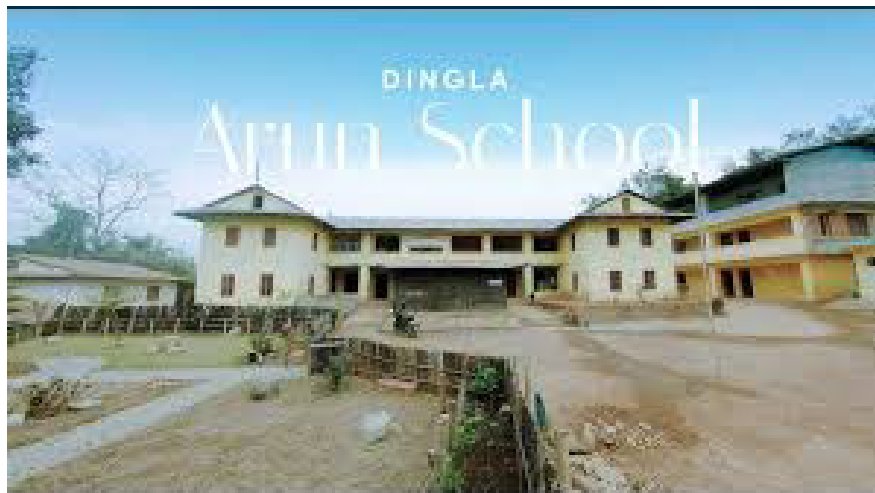
He initially approved my idea that a new monetary system,  
linked to the actual production cycle of the economy, is  
essential for overcoming the current economic crisis



And

For dedication to my childhood school, where I received my early education

Arunodaya High School, Dingla, Keurenipani, Sadananda Nagar Palika,  
Dingla Bazar, Bhojpur, Nepal



## **Foreword**

In the last 25 years, almost three major business cycles (such as the Dot Com Bubble Burst of 2000, the Global Financial Crisis of 2008, and the Covid-19-related economic downturn of 2020) have severely affected the major capitalist economies. The ripple effects were felt across the globe, including in South Asian countries. On average, it appears that every decade witnesses small or large business cycles.

Similarly, in 1971, gold was priced at \$35 per ounce in the USA. By December 2025, the same gold had crossed \$3,500 per ounce. In April 2026, the price of gold is rising further, having already surpassed \$4,000 per ounce. Likewise, in India, gold was priced at 181 per 10 grams (24 carat) in 1970, but it now stands at 1,45,000 per 10 grams (24 carat), representing more than a 700-fold increase in just 54 years.

These examples provide concrete proof that not everything has gone well over the past 54 years, ever since President Nixon closed the gold convertibility window on 15 August 1971, thereby breaking the promises made at the Bretton Woods Conference of 1944. During the gold standard era itself, the US economy crumbled in 1929, with ripple effects felt worldwide. The New York Stock Exchange benchmark only returned to its previous (1929) level in 1954. Some historians have even partially attributed the outbreak of the Second World War to the after-effects of the Great Depression. While I am not in a position to verify this claim amid many counter-arguments, it is undeniable that economic distress deeply affects mass psychology.

In this context, my colleague Mr. Roshan Chapagain, who practices with me at the Supreme Court of India, has been researching the field of economics for many years in search of an alternative system capable of overcoming the above-mentioned anomalies. He has developed two combined theories: the industrial production theory of money (meant for industrial value addition processes, which utilises the real bills doctrine in his method) and the trade cycle theory of money (meant for the sale and purchase of finished goods) which is similar to coupon money practiced in war periods. In his system, pure service and non-industrial production utilise the trade-cycle-based monetary circuit on the money bounce principle. He has named his economic system the 'Barter Standard Economy', and he claims that the economic system is self-functioning (like the invisible hand theory of Adam Smith) on market economy

**RANJI THOMAS**

Senior Advocate

416, Lawyers' Chamber,  
M.C. Setalvad Block  
Supreme Court of India,  
Bhagwan Dass Road,  
New Delhi-11 0001  
Phone: +91-11-23070099, 9811130942

principles. He claims that the economy runs like a barter economy (without any human manipulation), but it removes the double coincidence of wants and other hurdles of the barter economy. Thus, the economy is a monetary economy, but it assumes the character of a barter-like character. He further claims that in such a case, total money supply would always be equal to the monetary value of goods and services produced in the domestic economy of any country. Therefore, due to the change of the monetary system into the Barter Standard Economy, in future there would be no money-supply-related business cycle, which he has again claimed in the book titled, **'Barter Standard Monetary Economy and Socialism: Interrelationship and Earlier Mistakes.'**

Apart from that, his system (the Barter Standard Economy) also guarantees collateral-free, 0% interest rate welfare credit to every citizen for urgent economic needs such as medical care, healthcare, accidental situations (like a pandemic), and unemployment-related problems. In his system, welfare credit recovery is only possible from monthly income (income-contingent) of the welfare credit debtor. If a person dies without having paid the welfare credit, in no case can such welfare credit be recovered from ancestral property. Thus, after death also, recovery of the welfare credit would be only possible from personally acquired property. He claims that in such a case, every citizen would have every opportunity to acquire any skill and educational qualification required for their livelihood, and no citizen would have to die due to the unavailability of medical care. Regarding livelihood for every citizen, in his system, through a co-operative mechanism, every citizen would be able to obtain collateral-free credit (0% interest rate) with certain restrictions, where the business would be operated under a centrally government gate-pass-controlled mechanism (viz. central gate pass and government-provided transport mechanism) in a special economic zone.

I am a lawyer by profession and possess limited knowledge of alternative economics. I have almost forgotten many of the economics lessons I studied during my school and college years. Hence, I am not in a position to independently verify all the claims made by Mr. Chapagain in this field. Nevertheless, having been in touch with him for many years as a professional colleague, I personally hope that all such socialist claims would democratise society a great deal and make progress for times to come.

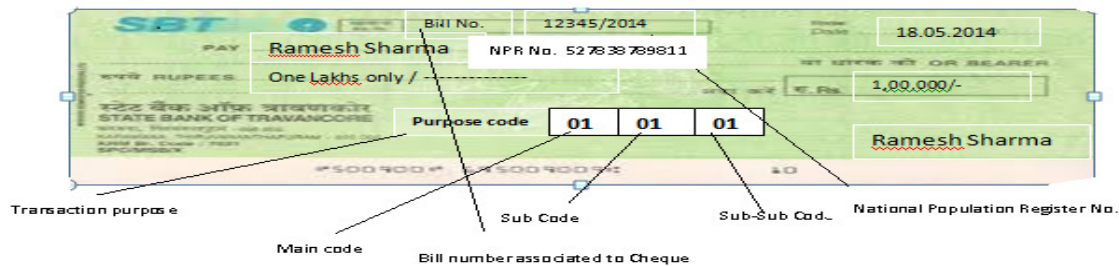
Date: 09.04.2026



Ranji Thomas,  
Senior Advocate V

## Preface for the First Edition

In 2014, when the for-and-against debate for Goods and Services Tax (GST) was going on in India, the present author represented before the government that the method of tax collection should be real-time tax collection or point-of-sale-based after using a check-coding methodology. Subsequently, my colleague at the Bar, Praveen Chaturvedi, and Bhanu Pratap Gupta supported the cause and further made it a public-interest issue. At that time we were of the view that if real-time taxation, or at least point-of-sale-based, GST would be simple, which can be visualised in the following manner:



In modern times, banking payments have become the new normal, and they can be both real-time and offline. In the above example, codification of a banker's cheque is shown, but in other types of instrument-based payment (except promissory notes and bearer bonds), the payment principle will be that of bills of exchange, where three major parties are involved. Among them, one is the payer, another is the payee, and the third is a middleman who pays the money on behalf of the payer (i.e., a banker in modern times). Thus, when one person transfers money to another person, we can add a purpose code to such payment instrument. In such a case, we can pay the applicable tax amount (if any) directly to the government (all tiers of government), and the payment instrument becomes a four-party instrument that receives the tax component. Therefore, whether a payment instrument is electronic or offline makes no major difference, and similar provisions can be added to bills of exchange, letters of credit, and any other payment instrument. Additionally, if the GST rate were a flat rate of 50% on everything, then the system would be even easier, then a categorisation list becomes unnecessary and the law becomes a ten-page document.

However, contrary to the above logic, the existing VAT system has a major drawback: for tax rebate purposes, the system needs a big bureaucratic exercise. Initially, tax is collected, and later, after a businessman shows proof of payment, he can subsequently withdraw excess tax paid, which makes the VAT system more complicated. In GST, the same VAT-related provisions are adopted, which makes the GST provisions further complicated. This is the worst part of the current tax system, where every honest businessperson, ordinary citizen and government suffers.

Thus, I have visualised that we need to make further progress so that no businessman needs to bother about tax compliance and there is no need for every



businessman to bother about the tax system. I therefore tried my best and found that double-entry accounting is insufficient to make further improvement if we include a real-bill-doctrine-based, zero-cost bill/invoice discounting-friendly banking system. In recent times, there has also been discussion on the development of triple-entry accounting to facilitate blockchain banking, but I still found it insufficient. Thereafter, after taking 4-5 years to mentally visualise the benefits of a centralised multiple-entry accounting system (CMEAS) where we can discount the bills/invoices of every businessman hassle-free. In such a zero-cost discounting system, the government bank pays the money at 0% for the working capital needs of every business on the endogenous money principle (discussed in detail in Chapters 75 to 80) as credit to every businessman. Thus, when a businessman, after value addition, issues a bill/invoice to his customer (in the value-addition chain), subsequently, previous loans are paid, including the wages/salaries of his staff. Thus, tax rebate becomes the headache of the government. As a result, it compels any government to draft proper legislation so that a small bureaucracy can solve the problem.

However, for the implementation of the real-bills-doctrine-based endogenous money supply provisions, adaptation of the monetary system is also necessary, where the difference between the monetary circuit based on the industrial production theory of money needs to be synchronised from the trade-cycle-based monetary circuit. Thereafter, if we create a different monetary circuit, then the monetary system needs a fixed unit of account value.

In the past, Henry George and Proudhon idealised the labour-note-based payment system, but to date, no economist has been able to prove the labour theory of value. Thus, I decided to apply a commodity-standard fixed unit of account, where I decided to use the 10-gram copper coin as unit of account for the domestic economy and the 10-gram gold coin as unit of account for international trade, so that the balance-of-payments-related ledger can be separated. In the above manner, during the process of taxation reform, a completely new monetary system evolved, similar to a barter economy, where the total money supply is exactly equal to the total monetary value of goods and services produced in the domestic economy. Thus, I decided to name the new unit of account the “Barter Standard Unit of Account Monetary System (BSUAMS)”, and while trying to improve the taxation system, a completely new economic system has evolved, which is friendly to a socialist economy, where the government bank provides 0% interest loans (in certain cases, collateral-free). Thus, it is a socialist system where welfare credit is guaranteed at 0% interest, collateral-free and contingent on the income capacity of the beneficiary.

Chandragadi, April 2026

Roshan Chapagain, Advocate



# Contents

---

|                                                                         |                                                                                                                                                  |      |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------|
|                                                                         | Title Page                                                                                                                                       | i    |
|                                                                         | Copyright                                                                                                                                        | ii   |
|                                                                         | Dedication                                                                                                                                       | iii  |
|                                                                         | Forward                                                                                                                                          | iv   |
|                                                                         | Preface                                                                                                                                          | vi   |
|                                                                         | Index                                                                                                                                            | viii |
|                                                                         | Introduction                                                                                                                                     | 1    |
| PART 1: General Characteristics of Money                                |                                                                                                                                                  |      |
| Chapter 1:                                                              | Which Came First the Unit of Account or Money as an Instrument?                                                                                  | 11   |
| Chapter 2:                                                              | Money or Bank: Which Came First?                                                                                                                 | 15   |
| Chapter 3:                                                              | Which Came First: Metal Coin or Banking?                                                                                                         | 17   |
| PART 2: Defects in the Existing Monetary System That Require Reform     |                                                                                                                                                  |      |
| Chapter 4:                                                              | Dilution of Money's Meaning: From Commodity to Fiat Money (Which Possesses Neither a Fixed Unit of Account Nor a Reliable Store of Value)        | 19   |
| Chapter 5:                                                              | The Cantillon Effect of Fiat Money and Its Impact on the Wealth Gap: Overlooked by John Maynard Keynes, Milton Friedman, and Thomas Piketty      | 26   |
| Chapter 6:                                                              | The Persistent Myth of Fractional Reserve Banking                                                                                                | 35   |
| Chapter 7:                                                              | Negative Consequences of the Lender of Last Resort and Deposit Insurance                                                                         | 41   |
| Chapter 8:                                                              | Financial Indiscipline from Past to Present: A Comparative Study from Coin Debasement to the Financialisation of the Economy                     | 47   |
| Chapter 9:                                                              | The Excessive Use of Money for Speculative Purposes and the Failure to Advance Frederick Soddy's Proposal to Separate Speculative Money          | 55   |
| PART 3: Grounds for a Production Cycle (Industrial Production) of Money |                                                                                                                                                  |      |
| Chapter 10:                                                             | The Dangers of Speculative Demand for Money in the Modern Economy and the Case for Separating Speculative Money from General Use                 | 61   |
| Chapter 11:                                                             | Moral Hazard in Market-Based Finance: Risks Arising from the Expansion of Shadow Banking Money and Endogenous Credit from the Banking Sector     | 66   |
| Chapter 12:                                                             | The Bitter Legacy of the Monetary System: The Failure of Every Monetary System Except Pure Commodity Money and Central Ledger Systems            | 73   |
| Chapter 13:                                                             | The Failure of the Central Banking Concept: What Is the Way Forward?                                                                             | 92   |
| Chapter 14:                                                             | The Global Financial Crisis (2007–08): Evidence of Structural Flaws in the Modern Monetary and Financial System                                  | 101  |
| Chapter 15:                                                             | From a Loan-Cycle Money System to a Trade-Cycle-Based Monetary System: Ensuring that Money Flows Parallel to Goods and Services                  | 108  |
| Chapter 16:                                                             | From Irving Fisher to Milton Friedman: Failures of the Quantity Theory of Money in 1929 and 2007–08, and the Relevance of Production-Cycle Money | 122  |
| PART 4: Payment Concepts Relevant for Industrial Production of Money    |                                                                                                                                                  |      |
| Chapter 17:                                                             | Scrip: An Alternative Mode of Payment Similar to Coupon Money                                                                                    | 131  |
| Chapter 18:                                                             | Inspiration for This Book: Silvio Gesell's Vision for Creating Interest- and Inflation-Free Money                                                | 134  |

|                                                                                        |                                                                                                                                                        |     |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Chapter 19:                                                                            | First Experimental Models of Silvio Gesell's Demurrage Money Concept                                                                                   | 137 |
| Chapter 20:                                                                            | Relevance of Pierre-Joseph Proudhon's Mutual Credit, Labour-Note System, and People's Bank in Addressing Modern Global Financial Disorder              | 139 |
| Chapter 21:                                                                            | John Gray's Proposal: Labour Notes as a Standard Monetary Value for Future Economic Exchange and Their Practical Difficulties                          | 146 |
| <b>PART 5: Interrelation of Money, Markets, and Other Factors with Socialism</b>       |                                                                                                                                                        |     |
| Chapter 22:                                                                            | Karl Marx's Ignorance of the Importance of Small Businesses, a Neutral Monetary Medium, and a Transparent Market for the True Form of Socialism        | 153 |
| Chapter 23:                                                                            | The Hypocrisy of Existing Forms of Socialism: Plucking the Illusion of Free Money from a Blooming Tree                                                 | 161 |
| Chapter 24:                                                                            | Whether the Free Market Is an Obstacle to Socialism and Whether It Suffers from the Commodification of Land, Labour, and Money                         | 169 |
| Chapter 25:                                                                            | Collapse of the USSR Model of Socialism in 1991 Partly Due to the Adoption of Fiat Money                                                               | 181 |
| <b>PART 6: The Tragedy of Socialism Until Now</b>                                      |                                                                                                                                                        |     |
| Chapter 26:                                                                            | The Erosion of Left-Wing Thought: A Critique of Infiltration and Subversion                                                                            | 187 |
| Chapter 27:                                                                            | How the Merit of Socialism Has Been Misguided Until Now                                                                                                | 191 |
| Chapter 28:                                                                            | The Fallacies of Marxian Socialism: Where Karl Marx Misjudged the Revolution                                                                           | 197 |
| <b>PART 7: The Contributions of Henry George and Karl Polanyi to Socialist Thought</b> |                                                                                                                                                        |     |
| Chapter 29:                                                                            | Why Henry George's Land Value Tax Offers a More Sustainable Socialist Alternative to Forcible Land Nationalisation in Marxian Socialism                | 208 |
| Chapter 30:                                                                            | How Karl Polanyi's Market Socialism Is More Progressive than the State Capitalism of the USSR and the Monopoly Capitalism of Liberal Democracy         | 217 |
| <b>PART 8: The Role of Worker Co-operatives in Establishing Socialism</b>              |                                                                                                                                                        |     |
| Chapter 31:                                                                            | Empowering Workers: The Next Socialist Move after the Next Financial Crash – Transforming Failing Private Businesses into Worker Co-operatives         | 224 |
| Chapter 32:                                                                            | Benefits of Managing Public Sector Enterprises through a Workshop-Owner or Producer Co-operative Model                                                 | 230 |
| Chapter 33:                                                                            | The Fall of the USSR: Was It a Premature Tragedy of the Revolution? Could Worker Co-operatives Provide a Perpetual Alternative for Socialism           | 233 |
| <b>PART 9: Marxist Ambiguity on Money, Markets, and Value Theory</b>                   |                                                                                                                                                        |     |
| Chapter 34:                                                                            | Marx's Delusion About Value: His Denial of the Importance of a Neutral Monetary Medium, Free and Fair Markets, and a Banking System                    | 241 |
| Chapter 35:                                                                            | Marxist Crisis Theory: Can It Critically Examine the Causes of Credit Money Supply Contraction During and After Business Cycles?                       | 248 |
| Chapter 36:                                                                            | Why Later Marxists Diverged from Marx on Value Theory, Money, and Markets to Support Market Socialism                                                  | 252 |
| <b>PART 10: Marxist and Socialist Conflicting Views on the Causes of Crises</b>        |                                                                                                                                                        |     |
| Chapter 37:                                                                            | Debate on Capitalism's Overproduction Crisis: Failure to Understand the Non-Integration of Credit and Commodity Theories of Money                      | 261 |
| Chapter 38:                                                                            | Is Capitalism Inherently a Volatile Economic System by Its Very Nature?                                                                                | 275 |
| Chapter 39:                                                                            | Interpreting Market Crashes: Were They Caused by Overproduction, Simple Market Failure, the Modern Theory of Over-Financialisation, or Something Else? | 283 |

|             |                                                                                                                                                                                                                                       |     |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|             | PART 11: Modern Socialists and Neo-Communists' Surrender to Economic Injustice                                                                                                                                                        |     |
| Chapter 40: | Is Consumerism Not a Main Driver of Modern Poverty?                                                                                                                                                                                   | 293 |
| Chapter 41: | Causal Drivers of Inequality and Poverty: A Comparative Analysis of the Role of Speculative Finance and the Financialisation of the Economy                                                                                           | 298 |
| Chapter 42: | Risk-Reward Paradox: Public Risk, Private Reward: Why Do Private Businesses Receive High Risk-Reward Incentives When They Do Not Bear the Business Risk and Governments Are Compelled to Implement Keynesian Policies After a Crisis? | 308 |
| Chapter 43: | Concentration of Wealth: A Threat to Both the Economy and Democracy                                                                                                                                                                   | 310 |
| Chapter 44: | Misdeeds of the Economic System by a Few Wealthy Elites During Financial Crises and Alternative Methods for Overcoming Them                                                                                                           | 314 |
| Chapter 45: | Illicit Financial Flows from the Global South to the Global North: The Questionable Role of the Financial Action Task Force and the Global North                                                                                      | 320 |
|             | PART 12: 'Small Is Beautiful', Which Many Socialists Have Always Ignored                                                                                                                                                              |     |
| Chapter 46: | How Land Value Tax Can Reduce Unearned Land Rent, Support Small-Scale Farmers, and Promote Universal Access to Housing                                                                                                                | 325 |
| Chapter 47: | Why Small-Scale, Self-Employment-Driven Businesses Matter in Countering the Monopoly of Crony Capitalism and Big Business                                                                                                             | 331 |
|             | PART 13: True Meaning of the Public Sector, Which Earlier Socialists Ignored                                                                                                                                                          |     |
| Chapter 48: | Whether Non-Profit, Self-Employment-Driven Public Sector Enterprises Independently Undertake Business Risks                                                                                                                           | 337 |
| Chapter 49: | Collateral-Free Lending to Public Sector Enterprises: The Case for Centralised Accounting and a State-Managed Gate-Pass System                                                                                                        | 345 |
| Chapter 50: | Why Did Many Public Sector Companies Fail Worldwide? Is the Neoliberal Model the Real Answer, or Was an Alternative Path Overlooked?                                                                                                  | 349 |
|             | PART 14: The Denial of Minimal Government by Many Socialists and Communists                                                                                                                                                           |     |
| Chapter 51: | Strong Government vs Minimal Government: How the Barter Standard Economy Complements Polanyi's Regulation-Driven Model                                                                                                                | 355 |
| Chapter 52: | A Comparative Study of Minimal Government: The Barter Standard Economy versus Classical Liberal, Mutualist, Georgist, and Liberal Socialist Models                                                                                    | 362 |
| Chapter 53: | Misuse and Ambiguity of Socialism: True Socialism through a Minimal Government in a Barter Standard Economy Free from Inflation                                                                                                       | 367 |
|             | PART 15: Modern Socialists Never Strongly Opposed Demagogic and Dictatorial Politics                                                                                                                                                  |     |
| Chapter 54: | Blind to Monopoly Opportunities, Trapped in Joblessness: How Demagogic Politics Exploit Crises for Oligarchic Gain by Fuelling Divisions                                                                                              | 371 |
| Chapter 55: | How to Fund Budding Politicians from Humble and Honest Backgrounds                                                                                                                                                                    | 376 |
|             | PART 16: Democratic Right to Land, Technology, IPR, and Skills (Which Socialists Did Not Concentrate On)                                                                                                                              |     |
| Chapter 56: | Democratic Rights to Universal Access to Land, Technology, Know-how, Brand Value, Patents, Copyright, Industrial Designs, Capital, and Skills                                                                                         | 382 |

|             |                                                                                                                                                       |     |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|             | PART 17: Whether Creative Destruction of Capitalism Is Moral                                                                                          |     |
| Chapter 57: | Is Schumpeter's Concept of Creative Destruction an Incomplete Idea? Why the Economy Needs Safety Valves to Adapt to Change                            | 392 |
|             | PART 18: Commodification of IPR and Why It Should Be Publicly Owned, Which Many Socialists Did Not Concentrate On                                     |     |
| Chapter 58: | Establishment of Public Brand Industries under a 0% Interest Loan Scheme                                                                              | 398 |
| Chapter 59: | Alternative Financial Provisions for Private Brand Industries                                                                                         | 402 |
| Chapter 60: | The Ethics of the Commodification of Intellectual Property: Why Society Should Notionally Own Intellectual Property Rights                            | 403 |
|             | PART 19: Oversight of Smith and Marx Regarding the Non-Intrinsic Nature of Paper Money                                                                |     |
| Chapter 61: | Adam Smith and Karl Marx's Oversight: Ignoring the Non-Intrinsic Nature of Paper Money and the Importance of an Industrial Production Theory of Money | 411 |
| Chapter 62: | Unit-of-Account Ledger Payments: Historical Successes and the Misdeeds of Money Multiplication through Promissory Notes under Double-Entry Accounting | 432 |
| Chapter 63: | Why We Must Bid Farewell to the Existing Credit Theory of Money with the Help of a Fixed Unit-of-Account Value Central Ledger-Based Credit Money      | 445 |
|             | PART 20: The Incompatibility of Past Monetary Systems with the Principle of Equity                                                                    |     |
| Chapter 64: | The Curse of Gold Reserves: How Abandoning Them Can Unlock Interest-Free Capital and Make Portfolio Investment Unnecessary                            | 462 |
| Chapter 65: | Did the Gold Standard Cause the 1929 Crisis? Perspectives from Keynes, Friedman, Kindleberger, and Other Theories                                     | 467 |
| Chapter 66: | Can the Problems Caused by the Credit Theory of Money Be Resolved by Sovereign Money with a Fiat Character?                                           | 480 |
| Chapter 67: | Japan's 1991 Economic Struggle: Two Decades of Fiat Money Experience since 1971 and the Economic Catastrophe That Followed                            | 493 |
|             | PART 21: Moral Hazard of Banking and the Corporate Finance                                                                                            |     |
| Chapter 68: | What Is Wrong with Money Printing by Private Banks and Financial Institutions                                                                         | 501 |
| Chapter 69: | Moral Hazards of Limited Liability Arising from the Absence of Non-Liability Insurance Mechanisms for Third-Party Losses in Business Failures         | 505 |
| Chapter 70: | Moral Hazard of Limited Liability in Banking and Financial Institutions                                                                               | 510 |
|             | PART 22: Financialisation of the Economy and Its Damage to the Socialist Cause                                                                        |     |
| Chapter 71: | Did Financialisation Begin in the 1970s, or Is It a Permanent Feature of Every Hegemonic Phase of Capitalism as Giovanni Arrighi and Others Argue?    | 514 |
| Chapter 72: | Is Colonialism or Financial Imperialism Capitalism's Solution to Overproduction, or a Symptom of an Unstable Monetary and Financial System?           | 528 |
| Chapter 73: | Extraordinary Growth in Financial Assets: A Causal Effect of Financialisation of the Economy                                                          | 554 |
| Chapter 74: | Re-emergence of Feudalism from Financial and Monopoly Capitalism: How Credit Manipulation Replaced the Muscle Power of the Feudal Lord                | 558 |

|             |                                                                                                                                                                                                                                               |     |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|             | PART 23: Advantages of CMEAS in Addressing the Loopholes of Double-Entry Accounting                                                                                                                                                           |     |
| Chapter 75: | Did Banks Enable Finance Capital to Dominate Industry, as Hilferding Argued, or Was It Driven by Endogenous Money Creation Exploiting Loopholes in Double-Entry Accounting, Leading to the Financialisation of the Economy?                   | 567 |
| Chapter 76: | Why a Trade-Related Central Ledger-Based Accounting Depository Is Essential for Integrating Centralised Blockchain Accounting                                                                                                                 | 587 |
| Chapter 77: | Self-MCI (Money for Consumption and Investment) Creation and Destruction Functions of the Barter Standard Unit of Account Monetary System (BSUAMS)                                                                                            | 590 |
| Chapter 78: | How the Money Bounce Principle of MCI Token Currency Operates in the Pure Service Sector and Non-Industrial Production                                                                                                                        | 599 |
| Chapter 79: | Examples of Working Capital-Related Bills or Invoices and Their Zero-Cost Discounting Process in the CMB Money Environment of NBB                                                                                                             | 605 |
| Chapter 80: | A Centralised Multiple-Entry Accounting System Applicable to the Zero-Cost Discounting of Bills and Invoices in the Books of Account of Business Banks for the Value-Addition Process of Industrial Production in the Barter-Standard Economy | 612 |
|             | PART 24: Ideal Environment for Socialism in a Barter-Standard Economy                                                                                                                                                                         |     |
| Chapter 81: | Why Modern Education Must Be Decommoditised and the Need for a Central Examination Body to Quantify Equivalent Degrees for All Institutions                                                                                                   | 627 |
| Chapter 82: | Why Foreign Indirect Investment Matters: The Negative Role of FDI and FPI in Destabilising Future BoP Situations Often Overlooked by Politicians                                                                                              | 632 |
| Chapter 83: | Benefits of BSUAMS-Compliant Socialism as the Middle Path: A Progressive Alternative to Radical Capitalism, Communism and Anarchism                                                                                                           | 636 |
| Chapter 84: | The Importance of a Barter Standard-Based Socialist Economy: A Refined Form of Industrial Capitalism with Greater Benefits for the Lower Classes                                                                                              | 648 |
| Chapter 85: | Socialism Through a 0% Interest Loan Facility for Citizens Who Want to Start a Self-Employment Business                                                                                                                                       | 657 |
| Chapter 86: | Lessons Learnt from the Failures of State Capitalism and Monopoly Capitalism: Why Democratic Finance in a Barter-Standard Economy Is Essential for True Form of Socialism                                                                     | 659 |
|             | PART 25: Equity between Profit and Price in a Barter-Standard Economy                                                                                                                                                                         |     |
| Chapter 87: | An Optimal Approach to Price Control Throughout the Entire Financial Year                                                                                                                                                                     | 667 |
| Chapter 88: | Profit Control, Not Price Control, for Profit-Making Businesses on a Voluntary Basis                                                                                                                                                          | 669 |
| Chapter 89: | Digital Rationing: Indirect Methods for Price Control of Scarce Commodities                                                                                                                                                                   | 671 |
| Chapter 90: | Ensuring Fair Competition: Why Public Sector Incentives Matter for Market Equity and Price Reduction                                                                                                                                          | 672 |
| Chapter 91: | Why a Self-Declared, Annually Fixed Price Regime Is Essential for the Success of an Autonomously Run Planned Barter-Standard Economy                                                                                                          | 675 |
| Chapter 92: | Fixing Prices: Prohibition of Demand-Pull Inflation and Self-Management of Cost-Push Inflation through Annual Self-Declaration of Prices                                                                                                      | 687 |
| Chapter 93: | Foundations of Price Stability and the Management of Information Asymmetry and Bounded Rationality in a Barter-Standard Economy                                                                                                               | 693 |

|              |                                                                                                                                                                                            |            |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Chapter 94:  | Managing Price Stability of Imported Goods and Services in a Barter-Standard Monetary Economy                                                                                              | 698        |
| Chapter 95:  | How the Private Sector in the Barter-Standard Economy Determines a Self-Declared Fixed-Price Structure in Advance of the Next Financial Year                                               | 700        |
| Chapter 96:  | How the Public Sector in a Barter-Standard Economy Provides a Fixed-Price Structure at a Cost at Least 10% Lower than the Private Sector                                                   | <b>718</b> |
|              | PART 26: Benefits of Tax Rebate Provisions due to the Implementation of CMEAS                                                                                                              |            |
| Chapter 97:  | The Importance of Designing Effective Taxation and Rebate Systems in a Barter-Standard Economy                                                                                             | 723        |
| Chapter 98:  | Why the GST Rebate Mechanism Is Essential Not Only for Simplifying Tax Collection but Also for Implementing a Fixed Price Regime and Ensuring the Success of an Effective Rationing System | 729        |
|              | PART 27: Why Separate Money for International Trade Is Essential to the Success of a Barter-Standard Economy                                                                               |            |
| Chapter 99:  | Benefits of Separate Monetary Units for International Trade                                                                                                                                | 732        |
| Chapter 100: | Currency Swapping Centres and Centralised Billing and Data Repositories: Alternatives to Keynes's International Clearing Union (ICU) Concept                                               | 740        |
|              | PART 28: Ideal Deficit Financing Provisions for a Barter-Standard Economy                                                                                                                  |            |
| Chapter 101: | Deficit Financing in a BSUAMS-Compliant Economy: An Alternative to Keynesian Theory                                                                                                        | <b>754</b> |
| Chapter 102: | Distinguishing Deferred Payment Instruments, Money-Like Instruments, and the Challenges of Deficit Financing in a BSUAMS-Compliant System                                                  | <b>759</b> |
|              | PART 29: Banking Sector of the Barter-Standard Economy                                                                                                                                     |            |
| Chapter 103: | Provisions for the Salaries of Staff in a BSUAMS-Compliant Banking System                                                                                                                  | <b>763</b> |
| Chapter 104: | Types of Banks, Their Monies, Money-Like Instruments, and Deferred Payment Instruments Applicable to the Barter-Standard Monetary System                                                   | <b>765</b> |
| Chapter 105: | Types of Bank Accounts in the Barter-Standard Economy                                                                                                                                      | <b>771</b> |
| Chapter 106: | Can Digital Money and Digital Banks Be 100% Reliable?                                                                                                                                      | <b>786</b> |
|              | PART 30: Ease of Doing Business in a Barter-Standard Economy                                                                                                                               |            |
| Chapter 107: | Why the Barter-Standard Economy Proposes the Abolition of Existing Personal Income Tax Provisions and Simplifies Business Income Tax                                                       | <b>789</b> |
|              | PART 31: Character of Money in a Barter-Standard Economy                                                                                                                                   |            |
| Chapter 108: | A-B-C-D of the Modified Form of the Barter Economy: Exploring Its Strengths, Weaknesses, and the Nature of Barter-Standard Monetary Systems                                                | 791        |
| Chapter 109: | Why MCI, CMB, and MSP Are Separate Domestic Monetary Units in BSUAMS                                                                                                                       | 795        |
| Chapter 110: | Ideal Monetary Unit Values for MCI, CMB, and MSP Monies                                                                                                                                    | 801        |
| Chapter 111: | The Need for Two Distinct Metallic Coins in a Comprehensive Barter-Standard Economy Framework for Domestic and International Transactions                                                  | 804        |
| Chapter 112: | Strategy for Implementing a Barter-Standard Unit of Account Monetary System                                                                                                                | 807        |
| Chapter 113: | Redefining the Commodity Standard: Fully Anchoring Commodity Value in Credit Money Supply Across Industrial and Non-Industrial Production                                                  | 811        |

|                                                                                            |                                                                                                                                                                        |     |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Chapter 114:                                                                               | The Role of MCI in Ensuring the Guaranteed Sale of Industrial Goods and the Procedure for Handling Unsold Goods                                                        | 822 |
| Chapter 115:                                                                               | Why BSUAMS Is More Advanced and Shock-Resilient than Sovereign Money and CBDC Concepts Popularised after the 2007–08 Crisis                                            | 824 |
| Chapter 116:                                                                               | Why Endogenous Out-of-Thin-Air CMB Credit in Bank Ledgers Is Necessary for Industrial Value Addition in a Barter-Standard Economy                                      | 831 |
| PART 32: General Character of the Barter-Standard Economy                                  |                                                                                                                                                                        |     |
| Chapter 117:                                                                               | Guaranteed Conditions for the Consumption and Investment of Produced Goods                                                                                             | 834 |
| Chapter 118:                                                                               | Self-Correcting Mechanism of the Balance of Payments in the Barter-Standard Unit of Account Monetary System (BSUAMS)                                                   | 839 |
| Chapter 119:                                                                               | How Trade Cycles Demand the Creation and Destruction of Monetary Logs in BSUAMS: The Fundamental Flaw of Fiat and Commodity Peg Monetary Systems of the Past           | 849 |
| Chapter 120:                                                                               | Why Extra Incentives Should Be Provided to Non-Profit, Self-Employment-Driven Businesses to Support a Government-Facilitated Fixed-Price Regime                        | 854 |
| Chapter 121:                                                                               | Whether a 1-to-10-Fold Wage, Salary, or Income Difference Can Be Considered Progressive Compared to Marx’s Vision of Absolute Equality                                 | 859 |
| Chapter 122:                                                                               | How to Convert All Businesses into Limited-Liability Entities and Why Voting Rights Should Be Granted to Each Shareholder of Any Business in a Barter-Standard Economy | 862 |
| Chapter 123:                                                                               | Categories of Businesses in a Barter-Standard Economy                                                                                                                  | 865 |
| PART 33: Benefits of the Forgotten Legacy of the Real Bills Doctrine and the Law of Reflux |                                                                                                                                                                        |     |
| Chapter 124:                                                                               | The Forgotten Legacy of Adam Smith: Have Capitalist Economies Dishonoured the Real Bills Doctrine?                                                                     | 872 |
| Chapter 125:                                                                               | Mechanisms Necessary for the Safety of a Real Bills Doctrine–Based Money Supply: The Necessity of Multiple Monetary Circuits for the Law of Reflux                     | 878 |
| Chapter 126:                                                                               | Multiple Failures of the Currency School Since Its Implementation after 1844 and the Renewed Relevance of the Real Bills Doctrine of the Banking School                | 883 |
| PART 34: Why We Need Public Welfare Credit-Based Social Security                           |                                                                                                                                                                        |     |
| Chapter 127:                                                                               | Reforming Welfare Economics: How Self-Financed Systems Offer Greater Efficiency than Existing Government-Funded Models                                                 | 890 |
| Chapter 128:                                                                               | Do Consumption and Inflation Taxes Truly Serve the Public Good? Evaluating Welfare State Mechanisms and the Hidden Costs of a Freebie Culture                          | 896 |
| Chapter 129:                                                                               | Why Education, Health, and Public Welfare Should Not Be Free: Economic and Moral Justifications for a Welfare Credit-Based Support Mechanism                           | 904 |
| Chapter 130:                                                                               | Misrepresented Narratives That Confuse the Public: How Existing Public Welfare and Social Security Model Can Exploit the Poor to Enrich the Wealthy                    | 911 |
| PART 35: Why the Barter-Standard Economy Challenges the Existing Economic Model            |                                                                                                                                                                        |     |
| Chapter 131:                                                                               | Why the Barter-Standard Unit of Account System (BSUAMS) Is Proposed as a Solution to Today’s Economic Problems                                                         | 915 |



|                                                                                        |                                                                                                                                                           |      |
|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Chapter 132:                                                                           | Can a Commodity-Value-Anchored Credit Theory of Money Function Independently of the Industrial Production Theory of Money?                                | 925  |
| Chapter 133:                                                                           | Capital Misallocation: BSUAMS vs. the Existing System – The Role of Keynes in the Rise of Monetarism and the Growth of Fictitious Capital                 | 934  |
| Chapter 134:                                                                           | Problems of Fiat and Commodity-Pegged Systems vs. the Advantages of the Barter-Standard Unit of Account Monetary System                                   | 949  |
| Chapter 135:                                                                           | Contradictions of Anti-Countercyclical Measures During Booms, Money Hoarding, FDI, and Capital Flight During Business Cycles: Is There a Better Solution? | 955  |
| Chapter 136:                                                                           | Microeconomic and Macroeconomic Analysis of Multiple Monetary Units in a BSUAMS-Compliant Monetary-Cum-Economic System                                    | 960  |
| Chapter 137:                                                                           | Problems Associated with Neoliberalism, Conservatism, Protectionism, Financialisation, and the Relevance of BSUAMS                                        | 983  |
| Chapter 138:                                                                           | Economic Justice in a Barter-Standard Economy: A Framework for Managing Rent, Interest, and Profit (Which Attempts to Reduce Unearned Income)             | 996  |
| PART 36: Preservation of Traditional Manual Banking and Paper Currency for Emergencies |                                                                                                                                                           |      |
| Chapter 139:                                                                           | Which Is the True Alternative for Overcoming Current Economic Problems: Sovereign Money or BSUAMS?                                                        | 1006 |
| Chapter 140:                                                                           | Why Sovereign Paper Currency and Manual Ledgers Should Be Maintained as a Backup for Electronic Payment Failures During Emergencies                       | 1010 |
|                                                                                        | Glossary                                                                                                                                                  | 1012 |
|                                                                                        | Reference                                                                                                                                                 | 1018 |

## Introduction

There is a long dispute among many historians as to whether barter developed in the first instance or credit evolved in the first instance. In modern times, many scholars support the view that credit developed in the first instance and monetary system evolved from the credit system, rather than the barter system, which existed in earlier societies in limited extend. They opinioned that the barter system existed at the same time, when the credit system used to exist, but it was less widespread as compared to credit system. Thus, credit has played a major role in the evolution of the modern monetary system.

In recent times, the issue has been strongly argued by David Graeber in favour of the credit system where he said that barter system only exist between strangers. In this respect, thinkers like Joseph Schumpeter and Karl Polanyi had argued that capitalism evolved from credit systems and Polanyi further opined that barter was limited in scale in ancient times. However, in just the opposite, mainstream economists generally supported the argument that barter system evolved at first and thereafter credit system developed in subsequent times.

On this issue, Graeber is not new, there are many economists like Alfred Mitchell-Innes, Georg Friedrich Knapp, Joseph Schumpeter, Karl Polanyi and many other economists who supported the view that credit evolved prior to the evolution of the barter system. In this argument, anthropologist David Graeber in his 2011 work strongly criticized the mainstream argument. In this respect, Adam Smith was of the view that monetary system evolved from barter system and this evolution necessitated from division of labour.

It is after Smith, classical and neo-classical school mostly followed the same path and majority of the mainstream economy supported the same view where they recognize the prevalence of the barter system for the evolution of modern monetary system. In this regard, if we rely on the inner commune principle as a true and correct idea, then all resources are distributed among members of the commune. Thus, when a commune system exists in any society, trade is less necessary between the group members (Marxist call such band society as commune). Thus, trade becomes necessary when one group does not produce all of their economic needs and they are compelled to rely on trade with other groups people. Even Graeber admitted in his work that barter system used to exist among strangers. Thus, Graeber's argument on its own proves that inter-commune or inter-band trade in old society was more easily possible through barter system.

In modern times, money is exchanged between strangers and trade happens without any credit relation in which no big personal credit relation is necessary on

every occasion. Thus, in those ancient societies when it was very difficult to rely on strangers from different communes (or early society) when the struggle for survival was going on, credit (gift exchange, reciprocity) is difficult with other people belonging to a different commune. Therefore, primarily in the first instance, two herds (groups) would prefer to barter their goods or services, rather than giving and taking each other's goods on credit on a large scale. Thus, in primitive society, barter is easier to practice between strangers as compared to the credit based economic transactions when two herd (band) people trade with each other.

In the animal kingdom as well, monkeys or apes can exchange their food, but remembering the credit and executing it is a very complicated task for different groups of people in the ancient world when people were fighting with each other for their survival. In this regard, Graeber gave the example of Mesopotamian temple (or palace) based central ledger based credit systems of the past. Thereafter, based on this, he tried to prove that the monetary system has a long relationship with credit mechanism. However, Mesopotamian society was farming community and it was a settled society after the hunting age when it is easy for expansion of credit based transaction.

Therefore, the present writer came to a different conclusion in subsequent chapters (Chapter 1 and 2) that it is barter system, which developed at the first occasion, which is equally accepted by the classical school and some of the neo-classical followers. Moreover, the above-mentioned objection of anthropologists is analogous to the earlier arguments raised by Schumpeter, Polanyi, and many others, thus, it is not a new phenomenon.

Furthermore, it is for any monetary system to evolve, a unit of account is an important factor, and for the development of the unit of account of a commodity standard monetary system, the help of the unit of account of the money commodity is necessary. As a result, unit of account of any monetary commodity (in the modern sense, a metal coin) has a great role in the development of the monetary system. Therefore, without the help of the monetary commodity, which developed from the barter system, it is difficult to invent a monetary unit of account in a commodity-standard monetary system.

Furthermore, in commodity money based monetary environment (for example, let us assume no credit system exists in any society for the time being), then when we treat certain commodity as money commodity (often precious commodity with a longer store-of-value character) as medium of exchange, then certain unit of such commodity itself became the monetary unit. Thus, if we exchange two commodities at the same time, the money commodity is not used for everyday consumption, in such scenario such barter system between daily necessity and such neutral commodity (with no daily need but with long store of value and light weight) becomes a monetary commodity. As a result, the change

from barter system into commodity money environment, the process is less complicated when certain neutral commodity easily treated as a monetary commodity.

In this regard, in the past, metal coins played the major role as a money commodity or a monetary unit of account of commodity standard monetary system. Furthermore, the commodity money removes the hurdles of double coincidence of wants problem of the barter system. However, it is equally true that in a civilised society, the credit system is a fundamental part of the economic structure and credit plays the major role in the progress of a capitalist system, which is clearly visible in the last four to five centuries when capitalism evolved from feudalism. Therefore, it is also true that in a society if the credit system is not available, then such society suffers from liquidity constraints, but such economies can still function (albeit with slower growth).

Thus, capitalism helped society to prosper with the help of instrument-based credit money supply along with other factor. In later time, other banks also followed the same method adopted by Italian banks that primarily utilised the double entry accounting. As a result, for the first time, capitalism became successful in northern Italy where the banking system was in an advanced stage back in 14th-15th century Europe. They were well equipped for expansion of the credit mechanism with the help of bills of exchange, letters of credit, letters of payment, etc. As an outcome, in the later part, other European countries also developed banking systems which made a great contribution to the expansion of capitalism.

However, apart from abovementioned positive and productive role, over-expansion instrument-based credit system has an equally dangerous role due to its association with the increase in speculation activity when it many times increases the chance of financialisation of the economy. Moreover, speculation is possible if a bank and financial institution increase the liquidity beyond certain limit. In such system, even if the government decides the commodity standard monetary system, due to the over-expansion of the credit, the chain of government guarantee weakens. In such a situation, if the credit money supply expands significantly, the expanded money supply created by the banking sector can weaken the effective link between money and the underlying commodity standard. In such a case, the official monetary system may be counted as commodity standard, but the nature of the monetary system holds the character similar to fiat money when inflation can shoot up and financialisation of the economy increases.

In this regard, in subsequent chapters we will discuss that for the fixation of unit of account of any monetary system, barter system is more relevant and without the barter, there is no method for deciding upon the perfect method of fixing the fixed unit of account of any commodity standard monetary system in market economy. In the past, units of account have been defined by authority (states), but due to arbitrary fixation of exchange rate between gold and silver, in

the past whole bimetallic monetary system faced turbulence and it because one of the causes of its failure. Thereafter, the then major capitalist countries turned into single commodity based monetary system (e.g. gold standard). However, Gold Standard also faced the similar turbulence during the Great Depression and finally after 1971, in majority of the capitalist countries have adopted fiat money.

Thus, in the past many monetary systems failed, but there has been no incidence of mass-scale failure of the barter system despite its major drawbacks related to double co-incidence of wants. Many people may give explanation that barter system was never used on a large scale and due to this reason, there was no instance of large-scale failure of barter system. However, barter has its own limitations. Similarly, instrument-based credit system also bears certain limitations. Thus, if the credit system grows beyond a certain limit due to the availability of the easy access to instrument-based credit, it is possible that money supply can increase more than availability of the goods and services produced in any domestic economy.

In this issue of the many-fold drawbacks of credit mechanism, Adam Smith discussed the importance of real-bill-based money circulation in respect of which other later-period economists (such as John Fullarton and others) developed the theory of the real bills doctrine and the law of reflux. In this regard, Smith was of the view that credit-led money movement should ideally move along with the movement of the trade and commerce, and in such case, he was of the view that the growth of credit would become less harmful. However, if the money moves independently, it causes economic damage, which was seen in the John Law-led banking fraud incidence.

In this regard, Smith mentioned the John Law incidence, which Smith clearly noticed and for such reason he advised for promotion of bill discounting based credit flow mechanism with certain caution, the very financial practice which the banking system was already practicing during the lifetime of Adam Smith. Thus, according to Smith, in order to rectify the certain drawbacks of instrument-based credit system, he advised for usage of bill discounting based credit flow. However, the Banking Charter Act 1844 in England, finally indirectly rejected the principle of the real bill doctrine based money supply principle promoted by the banking school in practice, but economic theory of real bill doctrine is still alive. Thereafter, to date, no country has seriously thought to revive or promote the exclusive bill/invoice discounting based credit flow mechanism in modern times. Thus, modern monetary systems no longer rely exclusively on the principles of the Real Bills Doctrine. Thereafter, reserve mechanism became the rule when commodity standard system was practice upto 1971. However, it is after 1971 onwards, fiat money is the rule in most of countries.

Moreover, on the issue of excessive credit flow, many economists such as Hyman Minsky already cautioned about the danger associated with the expansion

of credit system. In this regard, he famously argued that stability leads to instability via excessive credit growth, speculation, and eventual crisis. Thus, speculation activity grew more after the evolution of capitalism in 13-14 century Italy when banking sector provided the sufficient credit-facility, but growth of speculation cannot be attributed solely to Italian capitalism the same type of speculation was also experienced in later phases of capitalism.

In such a system, oral credit does not disturb the matrix on a large scale because in oral credit system many times movement of goods and services is ensured in oral contract along with the movement of credit due to the nature of the oral contract. Thus, in small, trust-based economies, credit is often tied to real exchange, limiting speculation. For example, one individual can borrow certain goods from their neighbor after promising to pay in the future. Similarly, at a future date, such neighbor can pay another goods or services in return and settle the loan account in monetary terms. However, in a bank-extended instrument-based credit system, excess money is stored or preserved in a bank account for 5 to 10 years or even longer period, when the owner of money may not want utilize his bank account held money for some time for his convenience. As a result, instrument based credit make the economic system more vulnerable in later part, if money management is not managed systematically, as it should be.

In this regard, it has been noticed in the past that mismanagement of the credit system can be ruinous for economic system and society at large. Thus, in case of over-issuance of credit instruments, it increases the speculation related activity in the financial market. Thus, in credit mechanism when the bank started to issue credit instruments like bill of exchange, letter of credit, promissory notes and at the same time the same banking system started to open its facility to the general public to store their money, danger lies in such system when the overall scale and complexity of financial intermediation increases. Thus, if such expansion of credit and deposit creation is not properly managed, it can contribute to excessive credit related speculative activities, and systemic financial instability, as highlighted in the financial instability hypothesis of Hyman Minsky.

Otherwise, deposits are a standard feature of modern banking systems. Thus, the provision of bank accounts for common people enables individuals to safely save and preserve their money where many people save during their youth and prime working years (when income is higher) to fund expenditures in old age (when income is typically lower or absent). However, bank deposits do not directly or automatically absorb or eliminate the over-expansion of credit in the banking system in the long run. Thus, bank deposits can temporarily reduce spending in the economy by encouraging saving (thereby affecting liquidity), but they do not automatically or fully absorb excessive credit expansion. Instead, they enables further credit creation where total money supply increases. In such system, when the banking system started to absorb the excess liquidity after

utilizing the different liquidity-freezing tools, economy can be managed for some time, but such measures cannot permanently manage the excess liquidity flow. Thereafter, when people begin to increase their spending and reduce their savings, and when banks and financial institutions face difficulties, the financial system becomes unstable.

In this regard, the original character of finance was the same whether paper money was not yet in existence or was already in use. In a digital money environment also, the character of finance is almost the same; only a technology changes, but no fundamental change occurs. Therefore, in 1637, when the Tulip Bubble occurred due to the growth of the speculative market, at that time paper money was not yet in existence in Europe. However, money-like instruments such as bills of exchange, promissory notes, letters of payment, letters of credit, and many other instruments were already present, after functioning as a quasi-money-supply environment. Thus, it is concrete proof that even when there was no paper money in existence, speculation was still possible due to the availability of instrument-based credit money supply growth.

Moreover, during the Tulip Mania-related incident, speculative activity was facilitated not by modern paper money but by the use of credit instruments such as forward contracts. In such future-purchase contracts mechanism, participants often entered into agreements to buy tulip bulbs at future dates, which enabled speculation without immediate cash payment. This occurred in a context where the Amsterdam Stock Exchange was already in operation. Furthermore, Amsterdam had already developed into one of the most advanced financial markets in Europe at that time. Thus, speculation is possible even when an instrument-based credit money supply is in existence in the system. As a result, paper money is an extended tool of the promissory note (which is just one of the money-like instruments), and all parameters of finance were already present before paper money was invented in Europe.

Thereafter, when paper money started to expand in Europe **from** the 17th–18th century onwards in different European countries, the credit mechanism remained almost the same when most of the money supply was made by the banking sector. However, it is due to availability of the paper money which is acceptable to everyone, such credit mechanism of banking system further grew faster as compared to previous time. Thus, paper money further assisted in the financialisation of the economy where finance helped to increase the asset price. Subsequently, financial system further evolved with the development of central banking, commercial banking, and financial markets, but the core principle of financial system remained almost the same where majority of the money supply existed in the bank credit. At that time, up to the time of the Great Depression, almost all countries operated under some form of the commodity Standard system, but monetary system had never been a 100% reserve ratio at any point of

time. Thus, in gold standard period also, a substantial portion of the money supply was created through bank credit mechanisms. In such a system, from 1920 to 1929, finance increased phenomenally in USA and other Western world. As a result, total money supply grew faster as compared to the growth of monetary value of goods and services produced in the domestic economy. In such a mechanism, an expansion of money supply and credit helped to boost asset prices. However, at a certain peak, due to excessive speculation, overvaluation of stocks, the US stock market crashed in 1929, marking the beginning of the Great Depression. In such mechanism, due to contraction of credit money, money supply contracted and economy fell into depression (after a recession) which affected all major economies of that time.

It is after the Great Depression; John Maynard Keynes developed a different economic recovery theory when he advised that after the business cycle, government intervention and deficit spending is the major tool to overcome economic crises. Later, Milton Friedman advanced a monetary approach emphasising the role of controlling the money supply to ensure economic stability. However, one thing is common in both Keynes's and Friedman's proposal that both welcomed the liberal monetary policy as compared to classical economy where Keynes supported expansionary monetary policy in the period of recessions and counter-cyclical measure in the period of economic boom. On the other hand, Friedman supported controlled, rule-based constant money supply growth (irrespective of the business cycle). Similarly, Keynes gave more emphasis to treat the economic problem with the help of deficit finance led economic solution, which can increase the money supply indirectly. Thereafter, though Friedman dropped the deficit finance led economic recovery and placed emphasis on a constant money-supply injection formula, but in actual practice of his economic theory it is experienced that financialisation of the economy even grew further. Thereafter, finally, it is up to the time of the 2007-08 market crisis when Friedman already died (died in 2006), it is understood that neither Keynes formula can create complete economic recovery nor the Friedman-led economic formula can singlehandedly overcome the after effect of 2007-08 crisis.

As a result, after the 2007-08 crisis, a hybrid system (mixed policy approach) was adopted; but it is up to 2020, it is understood that the hybrid system increased sovereign debt in the majority of major capitalist countries. As a result, if the market fell in 2026 or 2027 (hypothetical) in any of the major capitalist countries (which is expected) with a high debt-to-GDP ratio (viz. debt-to-GDP ratio over 100%), such a country primarily either would not be able to adopt the deficit-finance-led economy-recovery measure, or even if it tries to stabilise the economy with the highest debt-to-GDP ratio measure, even then it will face the same problem which Japan faced for the last 3–4 decades. Moreover, in 1990 when Japan faced the crisis, its balance of payments was sound, and for such reasons



only it was earlier able to maintain the highest possible debt-to-GDP ratio of more than 250% for long time. In a case where sovereign debt is already very high and the balance of payments is not sound, such countries will face economic stagnation due to high debt constraints, as faced by Japan since 1990.

Furthermore, the crisis in one country will have a ripple effect on another country. During the Sri Lankan economic crisis, Sri Lanka faced a situation requiring a bailout from other countries, not solely because its debt-to-GDP ratio was around 100–120%, but primarily due to a combination of high external (foreign currency) debt, declining foreign exchange reserves, fiscal mismanagement, and a severe balance of payments crisis. Moreover, the economic size of Sri Lanka is very small. Hence, in 2022, major economies helped it achieve a quick recovery. However, if a major economy like the USA, Japan, or China fell now (hypothetical), in such a situation no other country could help sufficiently to recover it. In this context, many Western economies, including the British, French, and American ones, now suffer as they are officially above 100% debt-to-GDP ratio. Thus, the economic situation after the Gulf War of 2026 leaves all major economies facing a dismal economic situation for recovery in the present, where the economic system looks dire.

In such a scenario, some economists attached to the Austrian School and a few proponents of classical monetary followers advocate a return to a gold-based monetary system as a safeguard against the present economic crisis since 1971. In fact, a Republican Party politician, Ron Paul, who tried to contest the 2012 US presidential election as a Republican candidate on the same issue. However, there is no guarantee that a return to the classical gold standard would itself cure the economic mess existing in the modern economy. In this regard, we have noticed that after an economic crisis (like 1929), for some time the barter economy also became relevant at that time.

Similarly, in a barter economy, there are two major obstacles: the double coincidence of wants and the physical transport of goods intended for exchange to the marketplace. However, with the use of information technology, modern barter systems can efficiently facilitate buyers and sellers and smooth the proceedings of accounting and final settlement when digital infrastructure helps to overcome the double coincidence of wants due to the use of modern technology, provided that barter-friendly digital credits or tokens are made available. In recent times, when the dollar system was banned in Iran and Russia, these countries in recent years have developed an advanced form of semi-barter system for arranging the trade with other countries from outside the SWIFT system. In such a mechanism, earlier India used to buy Russian oil in Indian rupees and deposits the money in a vostro account maintained by Russia in India. Subsequently, Russia would be able to purchase goods of its choice in India at any time and settle the account thereafter. Moreover, it is not a pure barter system,

but it has certain barter-friendly character. They are settlement systems with barter like features, not pure barter.

The present author, based on the Vostro account-led experiment of Russia, visualised a different economic concept in the present book. In his analogy, like a Vostro account-led transaction, if Russian goods (for example), prior to being sold to the retailer by their producer for final sale, are converted into a certain coupon money form from the end of the manufacturer to the extent of the monetary value of goods meant to be sold. In such a case, another merchant can be asked to purchase the coupon money on the first occasion prior to the purchase of Russian goods on bank credit. Thereafter, such coupon money can be used to purchase Russian goods (e.g., oil). Moreover, it bears resemblance to commodity-backed vouchers and trade credits. In such a trade cycle, if the coupon money is designed for single-time use (or sometimes twice), then there cannot be an incident of speculation, as in such a case the money is used only once for the purchase of goods. Thus, single-use (or sometimes double-use) tokens eliminate secondary market trading and thereby reduce speculative activity. In such a case, the common denominator can be a common unit of account where every country (termed as 'Barter Standard economy' in the present book) will be able to use the single unit of account.

In the present book, gold coin is treated as a single unit of account for international trade and copper coin is treated as a unit of account for the domestic economy. Thus, if every country uses the common denominator of a 10-gram highest-grade gold coin as unit of account for international trade, we can make international trade after accepting each other's currency easily when the units of account of every country are the same and if there is certain international body (like UN) to regulate the same. In such tokenised (coupon-money) system, we can convert the monetary value of its goods meant for export to other countries in the form of coupon money. In such a case, any foreign country such as Japan, after selling its goods to Sri Lanka, would be able to accept Sri Lankan coupon money. Thereafter, a Japanese businessman, after using such coupon money, would be able to purchase Chinese or Russian goods as per his convenience. Such system would be partly similar or analogous to Vostro account based transaction, if proper procedure is maintained. Furthermore, in such case no country would suffer from a balance-of-payments problems. Additionally, the present idea bears certain conceptual similarity to Keynes's proposed Bancor system. However, the specific coupon (bearing unit of account principle) mechanism is newly conceptualised due to advancement of the new technology.

In such an environment, owing to industrial growth, Japan can export its industrial goods, which are more value-added; but owing to industrial backwardness, Sri Lanka (hypothetically) may have to export its raw materials and other non-value-added agricultural commodities to Japan or another country.

However, like Keynes's Bancor system, it perfectly manages the balance of trade automatically, akin to barter trade. Thus, in a perfectly bilateral, balanced coupon system, balance-of-payments deficits are eliminated by design because every export automatically creates a claim for imports of equal value.

Moreover, the aforesaid arrangement is not a pure form of barter trade, but it is analogous to barter trade, since a unit of account and coupon money are used as intermediaries. It is indeed analogous to, but not identical with, direct barter. In such an environment, every country would automatically maintain the balance of trade. Thus, such a system guarantees a barter-like economic environment, where the economy on its own manages like the invisible hand principle of Adam Smith.

Similarly, in the domestic economy, barter-like or barter-standard (in tokenised form) coupon money cannot be manipulated by any interested parties (including the state), and it can create an atmosphere resembling barter-like trade environment. In the present book, by design, money meant for industrial production (value addition) uses the real-bills doctrine-based money-supply principle, which in this book is called the industrial production theory of money. Likewise, the trade cycle of finished goods utilizes the trade-cycle-based monetary system. Similarly, the speculative sector utilises a separate fiat-money structure without affecting the main economy.

Additionally in subsequent chapters, we further conclude that monetary impurity is the major foundational error of the capitalist system, which Karl Marx described as the overproduction crisis of capitalism. Thus, it is equally stressed that if the present monetary system is rectified, the error apparent in the capitalist system since the fourteenth century, due to the misapplication of the double-entry accounting system (which causes over-financialisation of the economy), can still be corrected, making capitalism less harmful. Thereafter, after amending certain political structures, we could still bring back the perfect form of a socialist system based on the principle of equity, where every citizen would have equal opportunity to grow, though it does not guarantee the practical success of any individual if another person chooses to be unsuccessful.

Likewise, under socialist principles, the present book discusses the importance of welfare credit, which utilises collateral-free, zero-per-cent interest-based credit mechanisms for the needy, where every citizen is entitled to welfare credit in case of need. Similarly, the present book completely abolishes the inflation tax and provides a consumption-tax rebate provision for the weaker sections of society. Thus, when every individual is given equal opportunity to grow, the system automatically becomes a socialist economy.